C H A P T E R 1

E M E R G E N C Y P R O C E D U R E S

1) RADIOTELEPHONE DISTRESS CALLS

The radiotelephone Distress Signal consists of the word **MAYDAY (**spoken three times). Transmit the distress call on **2182** kHz (HF-AM) or 156.8 MHz (**Channel 16**, VHF-FM). This distress call means you are threatened by grave and imminent danger and request immediate assistance. This distress call should include your position, description, and nature of distress.

This distress call has priority over all other transmissions. Any mariner hearing a distress call shall immediately cease any other transmissions capable of interfering with the distress message and shall continue to monitor the frequency on which the call was heard.

There have been several instances where vessels used a **MAYDAY** distress call to report they were out of gas, lost, having engine troubles, etc., but not in any immediate danger. **MAYDAY** should not be used in these situations and to do so is a violation of Federal Communications Commission (FCC) Regulations.

2) RADIOTELEPHONE URGENT CALLS

The radiotelephone Urgent Signal consists of the words **PAN-PAN** (rhymes with DAWN), spoken three times. These key words indicate the sending station has an urgent message to transmit concerning the safety of a vessel, aircraft, or person, but does not necessarily imply that imminent danger exists or immediate assistance is required.

3) RADIOTELEPHONE SAFETY CALLS

The radiotelephone Safety Signal consists of the word **SECURITE** (pronounced SAY-CURITAY), spoken three times. This key word indicates the sending station is about to transmit a message concerning the safety of navigation or give important weather warnings. This safety call is transmitted on 156.8 MHz (Channel 16, VHF-FM) or 2182 kHz (HF-AM) and will request you shift to a working frequency where the safety message will be transmitted.

4) RADIOTELEPHONE PROCEDURES ABOARD A VESSEL IN DISTRESS

The Coast Guard strongly recommends the operator, crew, and guests aboard any vessel become familiar with the following distress message format. You may want to post a copy near your radiotelephone. Do not call the Coast Guard on a Citizens Band (CB) radio; the Coast Guard does not monitor CB frequencies.

Transmit the distress call (MAYDAY) on 2182 kHz (HF-AM) or Channel 16, VHF-FM (156.8 MHz) and give:

a) Who you are (your vessel's name and documentation number);
b) Where you are (your vessel's position in latitude and longitude or magnetic bearing and distance in nautical miles from a known geographic point); and how you determined the position of your vessel.
c) What is wrong, and what type of assistance is needed.

At this point pause and wait for the Coast Guard or another vessel to respond. Be ready to provide the following:

d) The number of people aboard, and the condition of any injured;
e) Present seaworthiness of your vessel;
f) Description of your vessel: Type, length, hull material, open-cabin-flying bridge, number of masts, power, and color of hull, superstructure, and trim;
g) Have you activated an EPIRB, and if so on what frequency: 121.5 MHz, 243 MHz, or 406 MHz;
h) Safety equipment onboard your vessel: Life Jackets, raft, exposure suits, anchor, flares, hand-held radios, etc.

If your vessel is in distress and it is necessary to abandon ship, the radio transmitter should be set for continuous emission to provide rescue vessels and aircraft with a homing signal. (It is recommended that a roll of tape be kept near the radio to tape down the transmit key).

5) RADIOTELEPHONE PROCEDURE IF OBSERVING ANOTHER VESSEL IN DISTRESS

Transmit the distress call (MAYDAY) on 2182 kHz (HF-AM) or Channel 16, VHF-FM (156.8 MHz) and give:

a) Who you are (your vessel's name and call sign);
b) Your position, and the bearing and distance to the vessel in distress;
c) What is wrong with the vessel in distress;
d) Description of the vessel in distress;
e) Your intentions.

6) NON-DISTRESS CALLS TO THE COAST GUARD

If you are not in distress but need information from the Coast Guard, call the Coast Guard on either 2182 kHz or Channel 16, VHF-FM (156.8 MHz). You will be asked to shift to a working frequency which will allow the distress frequencies to remain clear. The proper call up procedure is described in Chapter 3, Communications.

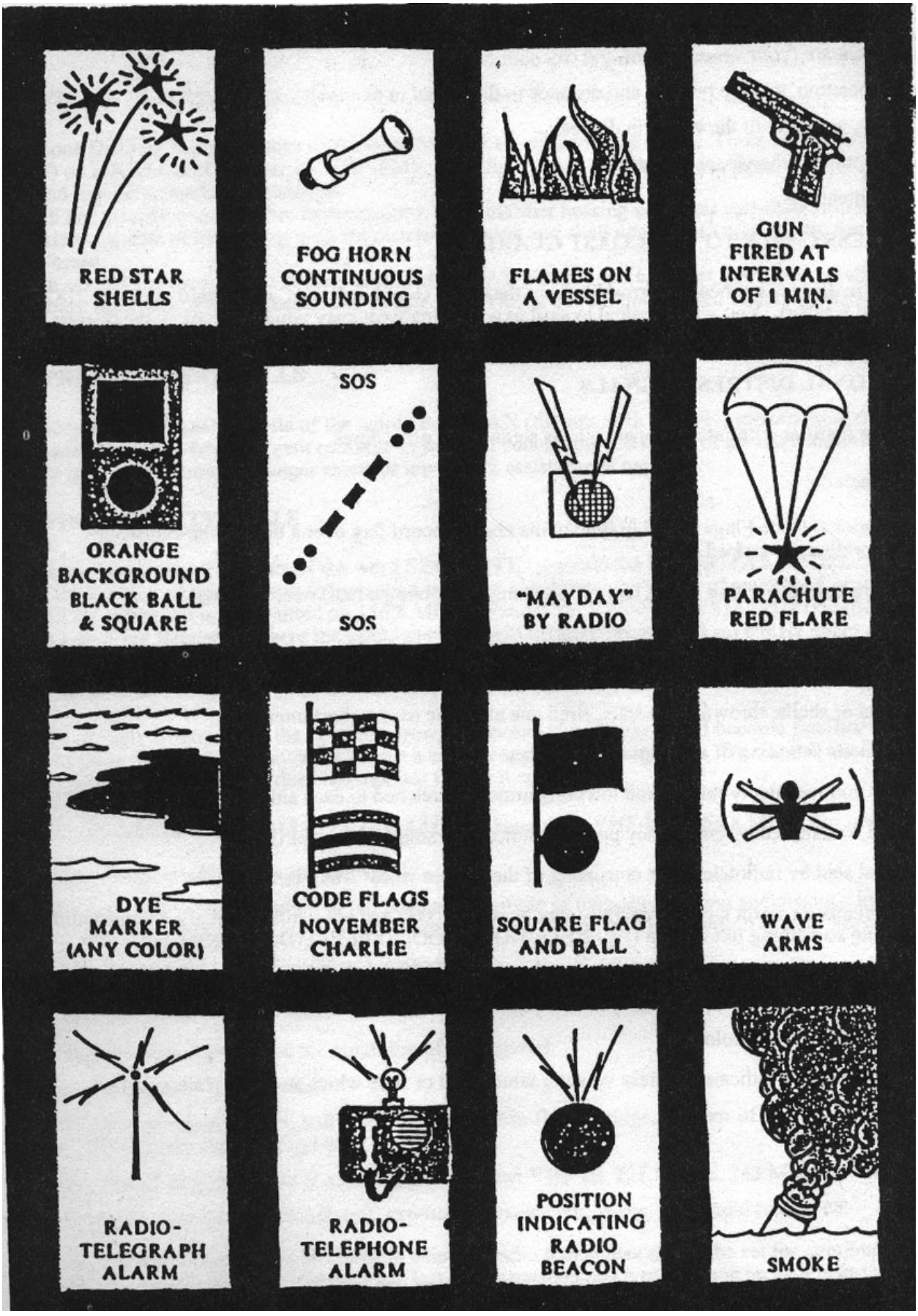
7) INTERNATIONAL DISTRESS SIGNALS

You should be familiar with international distress signals and procedures.

Distress signals include:

a) "SOS" (...---...) signal made by any audible or visual means;
b) International Code Flags: "NC" (a blue/white checkerboard flag above a blue-white-red-white-blue horizontally striped flag);
c) Hoisting any square flag with a ball (or anything resembling a ball) above or below it;
d) Flames made visible (as burning oil barrel);
e) A rocket parachute flare or hand held flare showing a red light;*
f) Rockets or shells, throwing red stars, fired one at a time over a short interval;
g) Continuous sounding of any fog-signal device;
h) Slowly and repeatedly raising and lowering arms outstretched to each side;
i) Signals transmitted by emergency position-indicating radiobeacons (EPIRBs);
j) A signal sent by radiotelephone consisting of the spoken word "MAYDAY";
k) Radiotelephone alarm signal: generally sent over 2182 kHz and consisting of an alternating audio signal sounding something like a siren (BEEEEEE-DOOOOOO, BEEEEEE-DOOOOOO, etc.);
l) A piece of orange-colored canvas with either a black square and circle or other appropriate symbol (for identification from the air);
m) A dye marker of any color.
n) Orange smoke emitted from distress flare.
o) A gun or other explosive signal fired at intervals of about 1 minute.
p) The radiotelegraph alarm signal.

*NOTE: A red light or flare indicates distress versus a white light or flare which is used for illumination.


RED STAR SHELLS
FOG HORN CONTINUOUS SOUNDING
FLAMES ON A VESSEL
GUN FIRED AT INTERVALS OF 1 MIN.
ORANGE BACKGROUND BLACK BALL & SQUARE
SOS
SOS
"MAYDAY" BY RADIO
PARACHUTE RED FLARE
DYE MARKER (ANY COLOR)
CODE FLAGS NOVEMBER CHARLIE
SQUARE FLAG AND BALL
WAVE ARMS
RADIO-TELEGRAPH ALARM
RADIO-TELEPHONE ALARM
POSITION INDICATING RADIO BEACON
SMOKE

8) VISUAL DISTRESS SIGNALS (VDS)

All recreational boats, except those listed below, are required to carry 3 day signaling devices and 3 night signaling devices. A combination of non-pyrotechnic and pyrotechnic signaling devices may be used to meet these requirements. Pyrotechnic and non-pyrotechnic Visual Distress Signaling Devices must be Coast Guard approved, in serviceable condition, and readily accessible.

No person in a boat shall display a visual distress signal on the water under any circumstances except in a situation where assistance is needed because of immediate or potential danger to persons onboard a vessel.

The following vessels only need to carry night signals when operating from sunset to sunrise:

a) Recreational boats less than 16 feet in length;
b) Boats participating in organized events such as races, regattas, or marine parades;
c) Open sailboats less than 26 feet in length not equipped with propulsion machinery;
d) Manually propelled boats.

USCG approved visual distress signals include:

DAY SIGNALS

Approval Numbers	Device Description
160.022	Floating Orange Smoke Distress Signal (3 to 4 minute duration)
160.037	Hand-held Orange Smoke Distress Signal
160.157	Floating Orange Smoke Signal (15 minute duration)
160.072	Orange Distress Signal Flag for Boats (at least 3x3 ft. With black square and ball on orange background)

DAY/NIGHT SIGNALS

Approval Numbers	Device Description
161.013	Electric Distress night use only Light for Boats /must automatically flash the international SOS distress signal (…---…)
160.021	Hand-held Red Flare Distress Signal
160.024	Parachute Red Flare Distress Flare (37mm)
160.036	Hand-held Rocket-propelled Parachute
160.066	Red Aerial Pyrotechnic Flare Distress Signal

WARNING: In California, launchers for meteor flares and parachute flares are considered firearms.

9) PYROTECHNIC HANDLING AND STOWAGE

Pyrotechnic devices should be stored in a cool, dry location and must be readily accessible in case of emergency. If young children are frequently aboard your boat, careful selection and proper stowage of visual distress signals becomes especially important. Coast Guard approved pyrotechnic devices are marked with a date showing the service life, which must not have expired.

10) GLOBAL MARITIME DISTRESS AND SAFETY SYSTEM (GMDSS)

The Global Maritime Distress and Safety System (GMDSS) is a collection of shipboard and shore-side communications equipment that provides for the transmission and receiving of distress alerts and safety information. The system is comprised of several components that can transmit a distress signal, specifically Digital Selective Calling (DSC) equipped radios, INMARSAT terminals, and 406 MHZ Emergency Position Indicating Radio Beacons (EPIRBs),. The U.S. Coast Guard maintains the capability to receive and respond to distress signals transmitted on GMDSS equipment.

(*For more information on GMDSS please see chapter 3, paragraph 11.)*

11) EMERGENCY POSITION-INDICATING RADIOBEACONS (EPIRBs)

EPIRBs broadcast a signal on a frequency monitored by most commercial and many private aircraft and Search and Rescue Satellites (SARSAT). An EPIRB provides a homing signal to guide Search and Rescue craft to the distressed vessel. EPIRBs are particularly effective when used in tandem with the SARSAT system. SARSAT monitors distress transmissions from EPIRBs and provides locations to world-wide Rescue Coordination Centers. EPIRBs are not designed to replace standard means of radio communications, such as VHF-FM or HF-SSB transceiver; however, effective use of an EPIRB and a two-way radio will reduce the time required to locate a vessel in distress.

For EPIRBs to be effective, all 406 MHz EPIRBs must be registered with the National Oceanic and Atmospheric Administration (NOAA) and the registration must be renewed every two years. For information or to have the re-registration form faxed, mariners can call: 1-888-212-7283, or go to the NOAA website to get the form at www.sarsat.noaa.gov.

NOTE: If it becomes necessary to activate the EPIRB in a distress situation, TURN IT ON AND LEAVE IT ON!

The following is a list of the types of EPIRBs:

a) 406 MHz EPIRBs use a frequency that is phase modulated by a digital signal. This means that in addition to the distress signal and homing assistance provisions, the digital signal contains information regarding beacon identifier, EPIRB registration data, and other, the country name and country identification code of the station in distress, and other information to facilitate search and rescue operations. All mariners should register their 406 EPIRB using the registration card provided when the EPIRB was purchased. Category 1 is automatically activated. Category H must be manually activated.

b) Class A: 121.5 & 243.0 MHz EPIRBs are stored in "floatfree" racks and energize automatically. No “category” reference to class A or B in SAR Manual

c) Class B: Manually activated version of classA.

d) Class C: Channel 16/15 VHF-FM EPIRBs broadcast on Channel 16 (156.8 MHz) 1.5 seconds, then transmit a 15 second locating signal on Channel 15 (156.75 MHz) for direction finding. Both signals repeat periodically after a given period, the EPIRB will recycle, returning to Channel 16 for 15 seconds and shifting to Channel 15. These EPIRBs must be energized manually.

EPIRB DETECTION: 406 MHz, Class A, and Class B EPIRBs can be detected by SARSATs (Search and Rescue Satellites) and high altitude aircraft. Class C EPIRBs can be detected by VHF-FM equipped vessels and shore units which monitor Channel 16.